6.0 ALTERNATIVES TO THE PROPOSED PROJECT

6.1 INTRODUCTION

The State CEQA Guidelines Section 15126 (d) requires that an EIR, "Describe a range of reasonable alternatives to the project, or to the location of the project, which could reasonably attain the basic objectives of the project and evaluate the comparative merits of the alternatives". Section 15126 (d)(1) states, "The discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." As stated in Section 15126 (d) (4), "The range of alternatives required in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision making and informed public participation."

Pursuant to the guidelines, a range of alternatives are considered and evaluated in this EIR. These alternatives were developed in the course of project planning and environmental review. The discussion in this section provides:

1. A description of alternatives considered;

2. An analysis of whether the alternatives are feasible (as defined by the CEQA Guidelines in Section 15364), meet the objectives of the project (described in Section 3.0 of this EIR), and remain under consideration (summarized in Table Y);

3. An analysis of the alternatives under consideration and the proposed project. The analysis ***of the alternatives that were considered during the Draft EIR*** is primarily summarized in Table Z. The focus of this analysis is to determine if feasible alternatives are capable of eliminating or reducing the significant environmental effects of the project to a level of insignificance. ***Please note that alternatives 6 through 9 were added subsequent to the preparation of the Draft EIR, in response to comments, and would result in impacts, which are reduced from or similar to the project description of impacts. Please refer to Sections 6.7 through 6.10 of this document.***

4. A description of the impacts of the alternatives that are not generated by the proposed project is summarized in Table AA.

5. Statements indicating why the alternative has been rejected from consideration, if appropriate.

Alternative Suggested by NOP Comment Letter

One of the several comment letters received on the Notice of Preparation (NOP) of the Draft EIR requested that the EIR consider an alternative that would allow for construction of a nine-hole golf course with 50 to 75 luxury homes bordering the course. Typically, a project of this nature would need a minimum of 80 acres to accommodate a nine-hole golf course. In order to accommodate 75 luxury homes with a minimum of 6,000 square foot lots, the project would require an additional 15 acres. A nine-hole golf course combined with 75 luxury homes would require at least 95 acres. The project site consists of only 49.5 acres; therefore, this alternative is not feasible and has not been further analyzed.

TABLE Y

SUMMARY OF ALTERNATIVES

Alternative	Technically Feasible	Meets Project Applicant's Objectives	Environmentally Superior	Under Further Consideration
1. No Project/No Development	Yes	No	Yes	Yes
2. Development under Existing Zoning	Yes	No	No	No
3. Alternative Location	No	No	N/A	No
4. Alternative Park Site Location	Yes	No	No	No
5. Alternative Roadway Connections -				
Alternate A	No	No	No	No
Alternate B	Maybe	No	No	Yes
Alternate C	No	No	No	No
6. Reduced Density Alternative (9-Lot County) with Existing Base Flood Elevation (June 2000 FEMA) – 10.9 Feet at Northeast Corner	***Yes***	***Yes***	***No***	***Yes***
7. Reduced Density Alternative (9-Lot County) with Projected Based Flood Elevation (updated FEMA with LOMR) – 4.5 Feet	***Yes***	***Yes***	***Yes***	***Yes***
8. Reduced Density Alternative (0-Lot County / CCC Conservation) with Existing Base Flood Elevation (June 2000 FEMA) – 10.9 Feet at Northeast Corner	***Yes***	***Yes***	***No***	***Yes***
9. Reduced Density Alternative (0-Lot County / CCC Conservation) with Projected Base Flood Elevation (Updated FEMA with LOMR) – 4.5 Feet	***Yes***	***Yes***	***Yes***	***Yes***

Source: EDAW, Inc.

TABLE Z

ALTERNATIVE SUMMARY MATRIX

CATEGORY OF IMPACT	DESCRIPTION OF IMPACT	ALTERNATIVE 1 NO PROJECT/NO DEVELOPMENT	ALTERNATIVE 2 DEVELOPMENT UNDER EXISTING ZONING	ALTERNATIVE 4 ALTERNATIVE PARK SITE LOCATION
LAND USE COMPATIBILITY				
	The proposed project may result in inconsistencies with the City's Affordable Housing Policy.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, may result in inconsistencies with the City's Affordable Housing Policy.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
AESTHETICS / LIGHT AND GLARE				
	The proposed project may be perceived as having a substantial, demonstrable, negative aesthetic effect due to the reduction of viewable open space areas.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project will result in the removal of eucalyptus trees, which could affect the current views of the site.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project may result in impacts to County-proposed trails.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
LIGHT AND GLARE				
	On-Site The project's development will increase the generation of light and glare on-site with on-site vehicle-related increases. In addition, the proposed project may result in an impact on the surrounding residential developments primarily to the north, and to some extent, to the east.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	Off-Site Lighting from the proposed development may result in light and glare impacts to adjacent off-site uses.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
TRANSPORTATION / CIRCULATION				
	The proposed project will result in short-term construction related impacts due to the addition of truck and construction vehicle traffic. Depending on the location of the haul route, traffic impacts along the selected route may occur.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will increase this impact.
	The proposed project may result in impacts to pedestrian, bicycle, and vehicular safety related to the establishment of access and an on-site circulation system.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will increase this impact.

*Note: **Alternatives 6 through 9 were added subsequent to the preparation of the Draft EIR and would result in impacts which are reduced from or similar to the project description of impacts. Please refer to Sections 6.7 through 6.10 of this document.***

TABLE Z

ALTERNATIVE SUMMARY MATRIX

CATEGORY OF IMPACT	DESCRIPTION OF IMPACT	ALTERNATIVE 1 NO PROJECT/NO DEVELOPMENT	ALTERNATIVE 2 DEVELOPMENT UNDER EXISTING ZONING	ALTERNATIVE 4 ALTERNATIVE PARK SITE LOCATION
TRANSPORTATION / CIRCULATION (CONT'D)	The proposed project in conjunction with other past, present, and reasonably foreseeable future projects will result in level of service deficiencies at the intersections Bolsa Chica Street and Warner Avenue and Graham Street and Warner Avenue under the year 2020 condition.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will increase this impact.
AIR QUALITY				
	The proposed project is anticipated to exceed SCAQMD's daily threshold emission levels for NO_x during construction activities. Further, the addition of emissions to an air basin designated as non-attainment is considered under CEQA to be a significant impact.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project is anticipated to exceed SCAQMD's daily threshold emission levels for CO and ROC. The daily exceedance of the thresholds for CO and ROC is a long-term air quality impact. Further, the addition of emissions to an air basin designated as non-attainment is considered under CEQA to be a significant impact.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, will result in a short-term air quality impact due to construction activities. The addition of emissions to an air basin designated as non-attainment is considered under CEQA to be a significant impact.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, will result in significant cumulative long-term impacts to air quality.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
NOISE				
	The proposed project has the potential to result in significant short-term noise impacts during exterior and interior construction activities.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project will increase the existing plus project traffic noise levels along Graham Street by up to 0.8 dB.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
EARTH RESOURCES				
	Significant settlements of peat deposits within the upper 5 feet could continue over the design life of the structures without mitigation in the form of removal and/or surcharge.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	The potential exists for significant impacts from the on-site mildly to severely corrosive soils.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.

Note: ***Alternatives 6 through 9 were added subsequent to the preparation of the Draft EIR and would result in impacts which are reduced from or similar to the project description of impacts. Please refer to Sections 6.7 through 6.10 of this document.***

TABLE Z

ALTERNATIVE SUMMARY MATRIX

CATEGORY OF IMPACT	DESCRIPTION OF IMPACT	ALTERNATIVE 1 NO PROJECT/NO DEVELOPMENT	ALTERNATIVE 2 DEVELOPMENT UNDER EXISTING ZONING	ALTERNATIVE 4 ALTERNATIVE PARK SITE LOCATION
EARTH RESOURCES (CONT'D)	The potential exists for soils with poor pavement support characteristics.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Potential impacts may result from soils with low shear strength.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Potential impacts may result from soil shrinkage.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Potential impacts may result from ground shaking.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Potential impacts may result associated with Liquefaction and Seismic Settlement.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Potential impacts may result associated with Tsunamis.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Potential impacts may result associated with Seiches.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	The proposed local dewatering may result in subsidence of adjacent properties along the project's northern property boundary.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	Groundwater impacts may occur.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	The potential exists for impacts from hazardous materials to occur.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
DRAINAGE / HYDROLOGY				
	The proposed project may result in potential impacts to drainage.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project may result in potential impacts associated with flooding.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project may result in potential impacts to water quality.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project would contribute to potential cumulative drainage, flooding, and water quality impacts.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.

Note: Alternatives 6 through 9 were added subsequent to the preparation of the Draft EIR and would result in impacts which are reduced from or similar to the project description of impacts. Please refer to Sections 6.7 through 6.10 of this document.

TABLE Z

ALTERNATIVE SUMMARY MATRIX

CATEGORY OF IMPACT	DESCRIPTION OF IMPACT	ALTERNATIVE 1 NO PROJECT/NO DEVELOPMENT	ALTERNATIVE 2 DEVELOPMENT UNDER EXISTING ZONING	ALTERNATIVE 4 ALTERNATIVE PARK SITE LOCATION
BIOLOGICAL RESOURCES				
	The proposed project may result in impacts to affected species locally and regionally.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	The proposed project may result in potential impacts to pocket wetland habitats on the County parcel.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
	The project, in conjunction with other past, present, and reasonably foreseeable future projects, will incrementally contribute to the cumulative loss of biological resources.	Alternative will reduce this impact.	Alternative will result in similar impact.	Alternative will result in similar impact.
CULTURAL RESOURCES				
	The proposed project may result in a significant impact on archaeological sites CA-ORA-1308 and 1309.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will increase this impact.
	The proposed project in conjunction with other past, present, and reasonably foreseeable future projects will incrementally contribute to the cumulative loss of potentially significant cultural resources.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will increase this impact.
PUBLIC SERVICES AND UTILITIES				
	The proposed project may result in impacts to public services and facilities.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.
	The proposed project will create increased demand for public services and utilities on a local and regional basis. Additionally, the project, in conjunction with other past, present and reasonably foreseeable future projects, will create an increased demand on fire, police, schools, community services, water, sewer, natural gas, and electrical services and facilities.	Alternative will reduce this impact.	Alternative will increase this impact.	Alternative will result in similar impact.

*Note: **Alternatives 6 through 9 were added subsequent to the preparation of the Draft EIR and would result in impacts which are reduced from or similar to the project description of impacts. Please refer to Sections 6.7 through 6.10 of this document.***

TABLE AA

IMPACTS OF THE ALTERNATIVES WHICH WOULD NOT RESULT FROM THE PROJECT

ALTERNATIVE	IMPACT
1. No Project/No Development	Continued existing drainage deficiencies at the Graham Street storm drain system.
2. Development under Existing Zoning	The proposed alternative would result in the development of 367 units, resulting in on-site and off-site land use compatibility impacts. Due to the construction of 367 units, this alternative would result in a significant perceived change of the site from vacant, undeveloped land to residential uses. This alternative would generate project traffic volumes greater than the proposed project due to the construction of 367 units. The construction of 367 units would result in short-term air quality impacts due to additional trucks and construction vehicle traffic. The additional homes developed through this alternative would generate traffic volumes greater than those generated by the proposed project, thereby increasing long-term mobile source emissions. The construction of 367 units would result in short-term noise impacts due to the additional trucks and construction vehicle traffic. The additional homes developed through this alternative would generate traffic volumes greater than those generated by the proposed project, thereby increasing traffic-generated noise levels. This alternative would result in increased surface water runoff due to the covering of surface soils with impermeable structures and surfaces.

TABLE AA

IMPACTS OF THE ALTERNATIVES WHICH WOULD NOT RESULT FROM THE PROJECT

ALTERNATIVE	IMPACT
	This alternative would require grading of a larger area to allow for residential pads, which could potentially disturb significant archaeological resources. The existing zoning would allow for development to be located within the proposed additional designated park area proposed by the project. This could impact CA-ORA-83. Because this alternative would result in the development of 159 additional units, the demands on existing public services and utilities (i.e., schools, sewer and water, fire protection, police, library, hospitals, transit, etc.) would be greater.
3. Alternative Location	N/A
4. Alternative Park Site Location	Locating the park along Graham Street would require a General Plan Amendment for the entire park site area. The "neighborhood" character of the proposed park would be lost under this alternative. The project-proposed location of the park site places it adjacent to an existing bluff ands eucalyptus trees, thereby expanding the overall open space/park area to ±8.2 acres. Relocation of the park site could potentially generate more project traffic volumes than the proposed project. Relocating the park site to Graham Street would impel more citizens to drive to this location, as it would be located off a main roadway and would not maintain a "neighborhood" character. Therefore, impacts associated with on-street parking would be greater than the proposed project. Development of residential uses within the area proposed as park/open space under the proposed project, would require grading to allow for residential pads, which could potentially disturb significant archaeological resources (CA-ORA-83).

TABLE AA

IMPACTS OF THE ALTERNATIVES WHICH WOULD NOT RESULT FROM THE PROJECT

ALTERNATIVE	IMPACT
	Due to the park site's adjacency to Graham Street, public safety impacts could occur.
5. Alternative Roadway Connections	**<u>Alternate Roadway Alignment A – Northerly Extension</u>** The roadway extension would affect the immediate views of the site that adjacent residents currently maintain. The extension of Bolsa Chica Street will have a prevailing speed of about 45 miles per hour. Adding another intersection immediately adjacent to the private driveway would create turning conflicts at the three legs intersecting Bolsa Chica at nearly the same point. This alternative would result in greater short-term air quality impacts than the proposed project. Impacts would result from short-term construction due to the addition of truck and construction vehicle traffic to construct the roadway extension. This alternative would result in long-term mobile source emissions similar to the proposed project. The roadway extension would not affect the number of residential units to be built; therefore, traffic volumes resulting in mobile source emissions would be similar. Increased construction noise levels would occur due to the increase of construction vehicles associated with roadway development. Noise impacts could occur due to more vehicles traveling through the project site. In order to accommodate the northerly roadway connection to Bolsa Chica Street, embankment fills varying up to 17 feet in height and southerly/northerly facing cut slopes to heights on the order of 20 feet would

TABLE AA

IMPACTS OF THE ALTERNATIVES WHICH WOULD NOT RESULT FROM THE PROJECT

ALTERNATIVE	IMPACT
	be required. Fills would induce settlements in the underlying alluvial soils on the order of one-half to one-inch for each foot of fill. This alternative would result in surface water runoff due to the covering of surface soils with impermeable structures and surfaces related to the roadway extension. This alternative would result in an increase in water runoff due to the construction of the roadway extension. The proposed northerly extension roadway would require grading, which could potentially disturb significant archaeological resources (CA-ORA-83). **Alternate Roadway Alignment B – Mid Extension** Construction of this middle extension roadway would cut through privately owned property proposed for development. The massive cut required to construct this roadway would completely eliminate this adjacent property's development potential. Because of the cut slope, access from that property to this street would not be feasible without further impacting that property. Depending on the vertical and horizontal alignment of Bolsa Chica Street, there may be a sight distance problem for southbound to eastbound left turns and for westbound vehicles seeing northbound vehicles at prevailing speeds on Bolsa Chica Street. This alternative would result in impacts from short-term construction due to construction of the roadway extension. This alternative would result in long-term mobile source emissions similar to the proposed project. The roadway extension would not affect the number of residential units to be built; therefore, traffic volumes resulting in mobile source emissions would be similar.

TABLE AA

IMPACTS OF THE ALTERNATIVES WHICH WOULD NOT RESULT FROM THE PROJECT

ALTERNATIVE	IMPACT
	This alternative would require construction of the roadway extension. Increased construction noise levels would occur due to the increase of construction vehicles associated with roadway development. Constructing the middle roadway connection to Bolsa Chica Street as proposed with this alternative, would require cut slopes approaching 40 feet in height. This alternative would result in surface water runoff due to the covering of surface soils with impermeable structures and surfaces related to the roadway extension. This alternative would result in an increase in water runoff due to the construction of the roadway extension. **Alternate Roadway Alignment C – Southerly Extension** Depending on the vertical and horizontal alignment of Bolsa Chica Street, there will most likely be a sight distance problem for southbound to eastbound left turns and for westbound vehicles seeing southbound and northbound vehicles at prevailing speeds on Bolsa Chica Street. This alternative would require a fill slope of almost 30 feet. This alternative would result in short-term construction noise due to the construction of the roadway extension. Increased construction noise levels would occur due to the increase of construction vehicles associated with roadway development.

TABLE AA

IMPACTS OF THE ALTERNATIVES WHICH WOULD NOT RESULT FROM THE PROJECT

ALTERNATIVE	IMPACT
	This alternative would require an embankment up to 35 feet in height. The proposed alignment would cross an existing gas line. Significant settlements, likely exceeding the structural capacity of the gas line, would be induced as a result of the embankment construction. Without extensive remediation, the required slope for this extension would be considered susceptible to seismically induced deformation (lateral spreading) project. This alternative would result in surface water runoff due to the covering of surface soils with impermeable structures and surfaces related to the roadway extension. This alternative would result in potential impacts related to flooding due to the construction of the roadway extension. This alternative would result in an increase in water runoff due to the construction of the roadway extension. The proposed southerly connection to Bolsa Chica Street would impact existing pickleweed located off-site.
6. Reduced Density Alternative (9-Lot County) with Existing Base Flood Elevation (June 2000 FEMA) – 10.9 Feet at Northeast Corner	***It substantially increases the finished floor elevations, which in turn increased the amount of import and hauling of dirt and lengthens the duration of grading operations and associated impacts (i.e., short-term air quality and noise impacts, etc.).***
7. Reduced Density Alternative (9-Lot County) with Projected Base Flood Elevation (Updated FEMA with LOMR) – 4.5 Feet	***None***
8. Reduced Density Alternative (0-Lot County / CCC Conservation) with Existing Base Flood Elevation (June 2000 FEMA) – 10.9 Feet at Northeast Corner	***It substantially increases the finished floor elevations, which in turn increased the amount of import and hauling of dirt and lengthens the duration of grading operations and associated impacts (i.e., short-term air quality and noise impacts, etc.).***
9. Reduced Density Alternative (0-Lot County / CCC Conservation) with Projected Base Flood Elevation (Updated FEMA with LOMR) – 4.5 Feet	***None***

Alternatives Analyzed

The following alternatives are discussed in this section:

1. Alternative 1 - No Project/No Development
2. Alternative 2 - Development Under Existing Zoning
3. Alternative 3 - Alternative Location
4. Alternative 4 – Alternative Park Site Location (alternative suggested during scoping meeting)
5. Alternative 5 – Alternative Roadway Connections (alternative suggested during scoping meeting)
6. ***Alternative 6 – Reduced Density with Existing Base Flood Elevation – 10.9 Feet at Northeast Corner***
7. ***Alternative 7 – Reduced Density with Projected Base Flood Elevation – 4.5 Feet***
8. ***Alternative 8 – Reduced Density with Existing Base Flood Elevation – 10.9 Feet at Northeast Corner***
9. ***Alternative 9 – Reduced Density with Projected Base Flood Elevation – 4.5 Feet***

A description of each alternative is provided and the alternative is discussed below. This section evaluates alternatives that may be capable of eliminating, or reducing to a level of insignificance, adverse impacts associated with the project. Additionally, the alternatives considered environmentally superior to the proposed project are identified.

6.2 ALTERNATIVE 1 - NO PROJECT/NO DEVELOPMENT

Description of Alternative

An evaluation of a "No Project" Alternative is required by CEQA Guidelines Section 15126(d)(2). Under this alternative, the proposed project would not be implemented and the site would remain in its current undeveloped state.

The No Project/No Development alternative would restrict development of the project site by not allowing the construction of the residential and park uses proposed as part of the project. The vacant, undeveloped site would remain as it is currently and no development would occur.

Environmental Assessment

LAND USE COMPATIBILITY

This alternative would avoid all land use impacts associated with the proposed project. Since the project site would remain in its current vacant, undeveloped state, potential impacts related to land use compatibility associated with the proposed project would not occur. Land use impacts would be avoided. Land use compatibility impacts would be less than the proposed project.

AESTHETICS/LIGHT AND GLARE

This alternative would avoid all aesthetics/light and glare impacts associated with the proposed project. The present appearance of the vacant, undeveloped site would not change and development of ~~208~~ ***206*** residential units and park uses would not occur. No aesthetic impacts to surrounding land uses would occur with the No Project/No Development alternative. Potential aesthetic/light and glare impacts resulting from the proposed project would be avoided with this

alternative. Impacts associated with aesthetics/light and glare would be less than the proposed project.

TRANSPORTATION/CIRCULATION

This alternative would avoid all impacts to transportation/circulation. This alternative would not contribute to short-term construction related impacts due to the addition of truck and construction vehicle traffic. This alternative also would not result in vehicular increases on the surrounding street system. Traffic improvements proposed for the project area would not be implemented with the No Project/No Development alternative; however they would be unnecessary with this alternative. Impacts associated with transportation/circulation would be less than the proposed project.

AIR QUALITY

This alternative would avoid all air quality impacts associated with the proposed project. No short-term or long-term increases in air emissions would result, as the project site would remain in its existing state. Impacts associated with air quality would be less than the proposed project.

NOISE

This alternative would avoid all noise impacts associated with the proposed project. As the project site would remain in its current state, short-term construction noise to adjacent sensitive receptors would not occur. Because this alternative would not generate additional vehicular traffic, nor would it result in the construction of the neighborhood park, no long-term traffic related noise impacts would result to surrounding land uses. Impacts associated with noise would be less than the proposed project.

EARTH RESOURCES

The project site currently contains loose soils prone to liquefaction. The project grading activities proposed to remediate the soils condition onsite would not be implemented with this alternative. Therefore, the existing condition of the site soils would remain. Impacts associated with earth resources would be greater than the proposed project.

DRAINAGE/HYDROLOGY

This alternative would avoid all impacts related to increased surface water runoff. This alternative would not result in the covering of surface soils with impermeable structures and surfaces. This alternative also will not result in the addition of pollutants typical of urban runoff.

Additionally, this alternative would not result in the benefits of drainage improvements to the Graham Street drain system, Slater Pump Station, or CO5. This alternative in effect, would not assist in providing drainage improvements to the neighborhoods located to the north and south of the project site.

BIOLOGICAL RESOURCES

This alternative would avoid all impacts related to biological resources.

ARCHAEOLOGICAL RESOURCES

This alternative would avoid all potential impacts related to archaeological resources.

PUBLIC SERVICES AND UTILITIES

This alternative would not result in impacts to public services and utilities as identified due to implementation of the proposed project. The No Project/No Development alternative would not place demands on existing public service facilities and services that currently accommodate the site. This alternative would not result in the expansion of the park/open space area as realized by the proposed project. This alternative also would not result in the provision of funds for park improvements as proposed by the project.

Status of Alternative

This alternative is technically feasible. It does not meet the project applicant's objectives. It is environmentally superior to the proposed project and remains under consideration.

6.3 ALTERNATIVE 2 - DEVELOPMENT UNDER EXISTING ZONING

Description of Alternative

Under this alternative, the proposed project would not be implemented, and the project site would be developed under the existing City of Huntington Beach and County of Orange zoning. The City of Huntington Beach parcel of the project site would be developed under the existing zoning, which allows for seven (7) dwelling units per acre. Based on 44.5 acres, development under the existing City zoning would allow for maximum buildout of 311 residential units. The County of Orange parcel of the project site would be developed under the existing zoning, which allows for 6.5 – 12.5 dwelling units per acre. Based on 4.5 acres, development under the existing County zoning would allow for maximum buildout of 56 units. This alternative would result in the total development of a maximum of 367 dwelling units.

Environmental Assessment

LAND USE COMPATIBILITY

This alternative would result in an increase in land use impacts, compared to that associated with the proposed project. Land use compatibility impacts both on-site and off-site would be greater with this alternative since it would allow for the development of ~~159~~ ***161*** units more than the

proposed project. Impacts associated with land uses are anticipated to be greater than the proposed project due to the increased density.

AESTHETICS/LIGHT AND GLARE

This alternative would result in greater aesthetics/light and glare impacts compared to those associated with the proposed project. The perceived change of the site from vacant, undeveloped land to residential uses would be more significant than the proposed project due to the increased density/intensity of this alternative. A total of ~~159~~ ***161*** more units would be built on the site with this alternative. Due to the increased density and intensity of this alternative, the overall impacts associated with aesthetics/light and glare would be greater than the proposed project.

TRANSPORTATION/CIRCULATION

This alternative would generate greater project traffic volumes than the proposed project due to the increased number of residential units. Impacts associated with transportation/circulation would be more than the proposed project.

AIR QUALITY

The construction of ~~159~~ ***161*** additional homes would result in greater short-term air quality impacts than those generated by the proposed project. Impacts would result from short-term construction due to additional trucks and construction vehicle traffic.

This alternative would result in long-term mobile source emissions greater than the proposed project. The additional homes developed through this alternative would generate traffic volumes greater than those generated by the proposed project, thereby increasing long-term mobile source emissions.

NOISE

This alternative would result in greater short-term impacts than the proposed project during construction activities, due to the increased number of homes to be built. Noise impacts generated by the increase in traffic also would be greater than the proposed project.

EARTH CONDITIONS

This alternative would result in similar impacts associated with liquefaction and soil settlement than the proposed project. The City would most likely require that any proposed development implement remedial grading activities. Therefore, similar impacts would be anticipated with buildout under the existing zoning.

DRAINAGE/HYDROLOGY

This alternative would result in increased surface water runoff due to the covering of surface soils with impermeable structures and surfaces, greater than those of the proposed project due to the ~~159~~ ***161*** additional homes to be constructed. This alternative would result in potential impacts related to flooding, similar to that of the proposed project. This alternative could potentially result in an increase in water runoff that is greater than that of the proposed project. Development under this alternative would not include the storm drainage improvements as proposed by the project.

BIOLOGICAL RESOURCES

This alternative would result in similar impacts to biological resources.

CULTURAL RESOURCES

This alternative would result in potential impacts to archaeological resources, greater than those of the proposed project. The development of this alternative would still be required to take into consideration significant archaeological resources located on site similar to the proposed project; however, the existing zoning would allow for development to be located within a portion of the designated park area proposed by the project. Development of residential uses within this area would require grading to allow for residential pads, which could potentially disturb significant archaeological resources (CA-ORA-83). Open space and park uses proposed by the project would be more environmentally sensitive to any archaeological resources than development of residential uses would be.

PUBLIC SERVICES AND UTILITIES

This alternative would result in greater impacts to public services and utilities than the proposed project. Because this alternative would result in the development of ~~159~~ ***161*** additional units, the demands on existing public services and utilities (i.e., schools, sewer and water, fire protection, police, library, hospitals, transit, etc.) would be greater. Additionally, this alternative would not result in the provision of funds for park improvements, nor would it result in the expansion of the park/open space area.

Status of Alternative

This alternative is technically feasible. It does not meet the project applicant's objectives. This alternative does not reduce impacts of the proposed project. Furthermore, it creates potentially new impacts not caused by the proposed project. Therefore, it is environmentally inferior to the proposed project and is removed from further consideration.

6.4 ALTERNATIVE 3 - ALTERNATIVE LOCATION

This alternative considers locating the proposed project at a different site. This alternative is required by CEQA and is intended to evaluate the option of the development of the proposed project at another site. Pursuant to CEQA Guidelines, any alternative site evaluated herein must have similar characteristics as the project site including size, landform, and amenity opportunities. Development would include the same type of use, density, and intensity as the proposed project site. Upon a preliminary analysis of the potential sites of approximately 49 acres within the City of Huntington Beach, the Holly-Seacliff development site was selected for consideration as an alternative site. This site was however rejected from further review due to various constraints encountered. The following discussion briefly describes why the Holly-Seacliff alternative site was dismissed.

As previously outlined in Section 3.0 Project Description of this EIR, the following objectives were identified by the project applicant:

Applicant

- Provide a variety of high quality residential consistent with the City's General Plan and Bolsa Chica LCP.
- Dedicate and improve park site consistent with the City's Land Use Element, which designates a portion of the site OS-P (Open Space - Park).
- Provide adequate infrastructure to support the proposed residential uses.
- Improve existing soils deficiencies found onsite through remedial grading.
- Improve drainage deficiencies by expanding capacity of Wintersburg Flood Control Channel.
- Replace, expand, and modernize existing deficient sewer pump station facilities.

City of Huntington Beach

- Create a development compatible with and sensitive to the existing land uses in the project area.
- Promote the development of residential land uses that convey a high quality visual image and character.
- Provide for necessary infrastructure improvements to accommodate the demands of new and existing development.
- Balance projected costs and revenues.

- Balance the City's long-term needs for residential property.

- Ensure adequate utility infrastructure and public services for new development, and that timing and funding of improvements is closely correlated with development phasing.

The Holly-Seacliff Project site is approximately 570 acres generally bounded by Ellis Avenue to the north, Huntington and Main Streets to the east, Yorktown Avenue and Summit Drive to the south, and the Edwards Street bluffs to the west. Currently approved uses for the site include Low Density Residential, Medium Density Residential, Medium High Density Residential, Mixed Development, Commercial, Industrial and Open Space. Ultimately, up to ~~3,895~~ ***3,022*** residential units may be constructed in the area over the next ten to fifteen years.

~~One (1)~~ ***Multiple*** area***s*** within the Holly-Seacliff Project area ~~is~~ ***are*** currently zoned for Residential - Low Density 1, allowing for residential densities ranging from 4 to 7 dwelling units per acre. These sites, however, are ***already developed and cannot*** ~~unable to~~ accommodate the project as proposed ~~due to size limitations~~.

Additionally, the location of Holly-Seacliff site does not meet the objective of remediating existing deficiencies related to storm drainage and liquefiable soils.

Based on the preceding analysis, the alternative site evaluation has been eliminated.

6.5 ALTERNATIVE 4 – ALTERNATIVE PARK SITE LOCATION (Alternative Suggested during Scoping Meeting)

Description of Alternative

This alternative assumes that the park would be located in another area of the site. Under this alternative, the proposed ~~±3.6~~ ***3.8***-acre park site would be located in the eastern portion of the site adjacent to Graham Street, rather than in the northwestern corner of the site adjacent to the existing bluffs and eucalyptus trees. The alternative park location would provide a buffer from Graham Street, which would be considered a positive aspect of this alternative.

Relocating the park adjacent to Graham Street would in turn relocate homes to the proposed project's park location in order to accommodate the total construction of ~~208~~ ***206*** units. Development of residential uses within this area would require grading to allow for residential pads.

Environmental Assessment

LAND USE COMPATIBILITY

This alternative would result in greater land use compatibility impacts, compared to those associated with the proposed project. Locating the park along Graham Street would require a

General Plan Amendment for the entire park site area, since that area of the proposed site is currently designated RL-7 (Low Density Residential).

Additionally, the "neighborhood" character of the proposed park would be lost under this alternative. The project-proposed location of the park site places it adjacent to an existing bluff and eucalyptus trees, thereby expanding the overall open space/park area to ±8.2 acres. The alternative would locate the park adjacent to Graham Street, which is a two lane commuter roadway, currently experiencing 7,200 average trips daily. This alternative would result in the separation of the park and open space area.

AESTHETICS/LIGHT AND GLARE

This alternative would result in similar aesthetics/light and glare impacts compared to those associated with the proposed project. Aesthetics/light and glare impacts resulting from the proposed project would also occur with relocation of the park site.

TRANSPORTATION/CIRCULATION

Relocation of the park site would potentially generate more project traffic volumes than the proposed project. Relocating the park site Graham Street would impel more citizens to drive to this location, as it would be located off a main roadway and would not maintain a "neighborhood" character. Therefore, impacts associated with on-street parking would be greater than the proposed project.

AIR QUALITY

This alternative would result in short-term air quality impacts similar to the proposed project. Impacts would result from short-term construction due to the addition of truck and construction vehicle traffic. This alternative would result in long-term mobile source emissions similar to the proposed project. Relocation of the park site would not affect the number of residential units to be built; therefore, traffic volumes resulting in mobile source emissions would be similar.

NOISE

This alternative would result in similar short-term impacts as the proposed project during construction activities. Noise impacts due to the increase in traffic would be similar to the proposed project.

EARTH RESOURCES

This alternative would result in impacts associated with liquefiable soils, similar to the proposed project. This alternative also would result in impacts associated with ground shaking and other geotechnical constraints, similar to that of the proposed project.

DRAINAGE/HYDROLOGY

This alternative would result in surface water runoff due to the covering of surface soils with impermeable structures and surfaces similar to the proposed project. This alternative would result in potential impacts related to flooding, similar to that of the proposed project. This alternative would result in an increase in water runoff that is similar to that of the proposed project. Relocation of the park site would neither reduce nor increase drainage/hydrology impacts resulting from the proposed project.

BIOLOGICAL RESOURCES

This alternative would result in similar impacts to biological resources.

CULTURAL RESOURCES

This alternative would result in a greater potential for impacts to archaeological resources than the proposed project. The development of this alternative would still be required to take into consideration significant archaeological resources located on site similar to the proposed project. However, relocating the park adjacent to Graham Street would in turn relocate homes to the proposed project's park location in order to accommodate the total construction of ~~208~~ ***206*** units. Development of residential uses within this area would require grading to allow for residential pads, which could potentially disturb significant archaeological resources. The park proposed by the project would be more environmentally sensitive to archaeological resources (CA-ORA-83). Development of residential uses would require grading, which would impact CA-ORA-83.

PUBLIC SERVICES AND UTILITIES

This alternative would result in impacts to public services and utilities, similar to those of the proposed project. Relocation of the park site would not increase, decrease, or eliminate impacts related to public services and utilities.

PUBLIC SAFETY

This alternative would result in potential public safety impacts due to the relocation of the project site. The park would be relocated adjacent to Graham Street, which experiences more vehicular traffic than the project-proposed park site location. Due to the park site's adjacency to Graham Street, public safety impacts could occur.

Status of Alternative

This alternative is technically feasible. It does not meet the project applicant's objective of dedicating and improving a park site consistent with the City's Land Use Element, which designates a portion of the site OS-P (Open Space-Park). This alternative does not reduce impacts of the proposed project and it does create new impacts not caused by the proposed project.

Therefore, it is environmentally inferior to the proposed project. It is removed from further consideration.

6.6 ALTERNATIVE 5 – ALTERNATIVE ROADWAY CONNECTIONS (Alternative Suggested during Scoping Meeting)

Alternative 5 consists of a roadway connection from the project site to Bolsa Chica Street. Three-(3) alternate plans (Circulation Alternative A through C) for street connections to Bolsa Chica Street were analyzed. It is assumed that implementation of this alternative would result in the construction of ~~208~~ ***206*** dwelling units and a park site, similar to the proposed project. The following discusses these alternate roadway connection alternatives.

ALTERNATE ROADWAY ALIGNMENT A – NORTHERLY EXTENSION

Description of Alternative

Alternate Roadway Alignment A involves a westerly extension of "B" Street, north of the proposed park site, connecting to Bolsa Chica Street (refer to Exhibit 44).

Environmental Assessment

LAND USE COMPATIBILITY

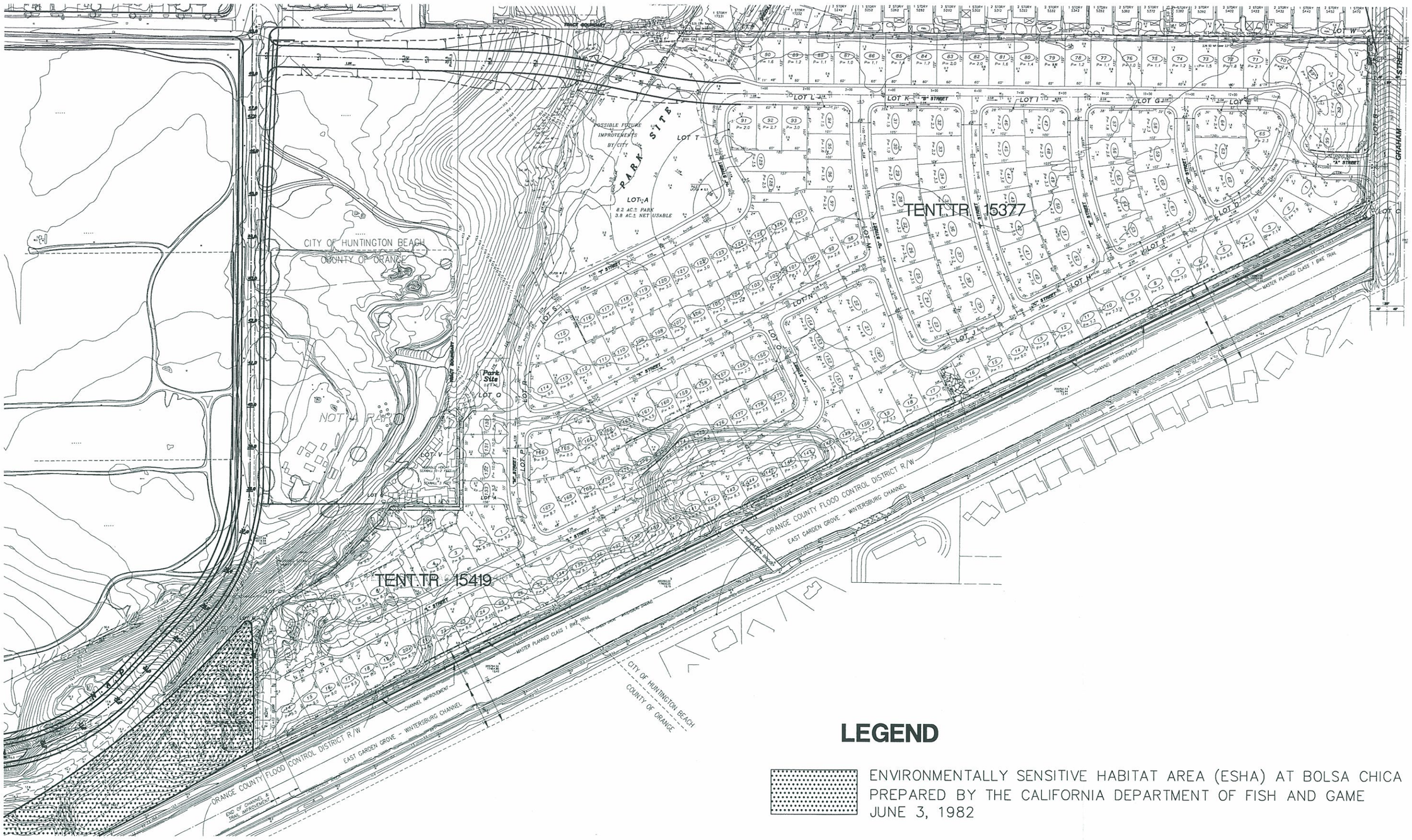
This alternative would result in land use compatibility impacts similar to the proposed project. This alternative would consist of the construction of ~~208~~ ***206*** residential units and the park site; however, the extension would result in the park site being smaller than it would be with the proposed project.

AESTHETICS/LIGHT AND GLARE

This alternative would result in greater aesthetics/light and glare impacts compared to those associated with the proposed project. Impacts would occur due to the proposed roadway extension's close proximity to the existing residential to the north. The roadway extension would affect the immediate views of the site that these residents currently maintain. Rather than having the view of the park as proposed by the project, these residents would be viewing the roadway extension. Overall impacts associated with aesthetics/light and glare would be greater than the proposed project.

TRANSPORTATION/CIRCULATION

According to Darnell & Associates, Inc. (project traffic engineers), this alignment would create a confusing and potentially dangerous intersection at Bolsa Chica Street. There is an existing Bolsa Chica intersection of Los Patos Avenue to the west and an opposite private driveway serving the condominium development to the east.



LEGEND

ENVIRONMENTALLY SENSITIVE HABITAT AREA (ESHA) AT BOLSA CHICA
PREPARED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME
JUNE 3, 1982

MAP DATE IDENTIFIER
DATE OF LATEST CHANGE TO THIS MAP: 2/24/00 BY: JJC
DATE OF THIS PLOT: 02/24/00

Scale: (approx.) 1"=225'

EDAW, Inc.

Source: Hunsaker & Associates Irvine, Inc.

Exhibit 44

Circulation Alternative "A"

The extension of Bolsa Chica Street will have a prevailing speed of about 45 miles per hour. Adding another intersection immediately adjacent to the private driveway would create turning conflicts at the three legs intersecting Bolsa Chica at nearly the same point. Impacts associated with transportation/circulation would be greater than the proposed project.

AIR QUALITY

This alternative would result in greater short-term air quality impacts than the proposed project. Impacts would result from short-term construction due to the addition of truck and construction vehicle traffic to construct the roadway extension. This alternative would result in long-term mobile source emissions greater than the proposed project, since the construction of this roadway extension would ultimately bring additional traffic closer to the existing residences adjacent to the roadway. The roadway extension would not affect the number of residential units to be built; therefore, traffic volumes resulting in mobile source emissions caused by the development of residential uses would be similar.

NOISE

This alternative would result in greater short-term impacts than the proposed project during construction activities. The alternative would require construction of the roadway extension in addition to construction of the proposed homes. Noise impacts could possibly be greater due to the fact that the roadway connection could cause more vehicles to travel through the project site. Noise impacts to existing residences along the roadway could be expected to be greater, as compared to open space uses as proposed by the project.

EARTH CONDITIONS

This alternative would result in impacts associated with liquifiable soils, ground shaking and other geotechnical constraints similar to the proposed project. Additionally, in order to accommodate the northerly roadway connection to Bolsa Chica Street, embankment fills varying up to 17 feet in height and southerly/northerly facing cut slopes to heights on the order of 20 feet would be required. Fills would induce settlements in the underlying alluvial soils on the order of one-half to one-inch for each foot of fill. Impacts related to earth conditions would be greater than the proposed project.

DRAINAGE/HYDROLOGY

This alternative would result in surface water runoff due to the covering of surface soils with impermeable structures and surfaces related to the homes and the roadway extension. This alternative would result in potential impacts related to flooding, greater than that of the proposed project. This alternative would result in an increase in water runoff that is greater than that of the proposed project. The roadway extension would increase the amount of impervious surfaces related to the proposed project. Impacts related to drainage/hydrology would be greater than the proposed project.

BIOLOGICAL RESOURCES

This alternative would result in similar impacts to biological resources.

ARCHAEOLOGICAL RESOURCES

This alternative would result in a greater potential for impacts to archaeological resources than the proposed project (CA-ORA-83). The development of this alternative would still be required to take into consideration significant archaeological resources located on site similar to the proposed project. However, the proposed northerly extension roadway would require grading, which could potentially disturb significant archaeological resources. Construction of the northern roadway extension would result in greater impacts related to archaeological resources than the proposed project.

PUBLIC SERVICES AND UTILITIES

This alternative would result in impacts to public services and utilities, similar to those of the proposed project. Construction of the roadway would not increase, decrease, or eliminate impacts related to public services and utilities.

Status of Alternative

This alternative is not technically feasible. According to Darnell & Associates, Inc., implementation of this alternative would create a potentially dangerous intersection at Bolsa Chica Street, due to its close proximity to the existing intersection of Los Patos Avenue/Bolsa Chica Street/private Cabo del Mar condominiums driveway. It does not meet the project applicant's objectives. This alternative does not reduce impacts of the proposed project and creates new impacts not caused by the proposed project. Therefore, it is environmentally inferior to the proposed project. It is removed from further consideration.

ALTERNATE ROADWAY ALIGNMENT B – MID EXTENSION

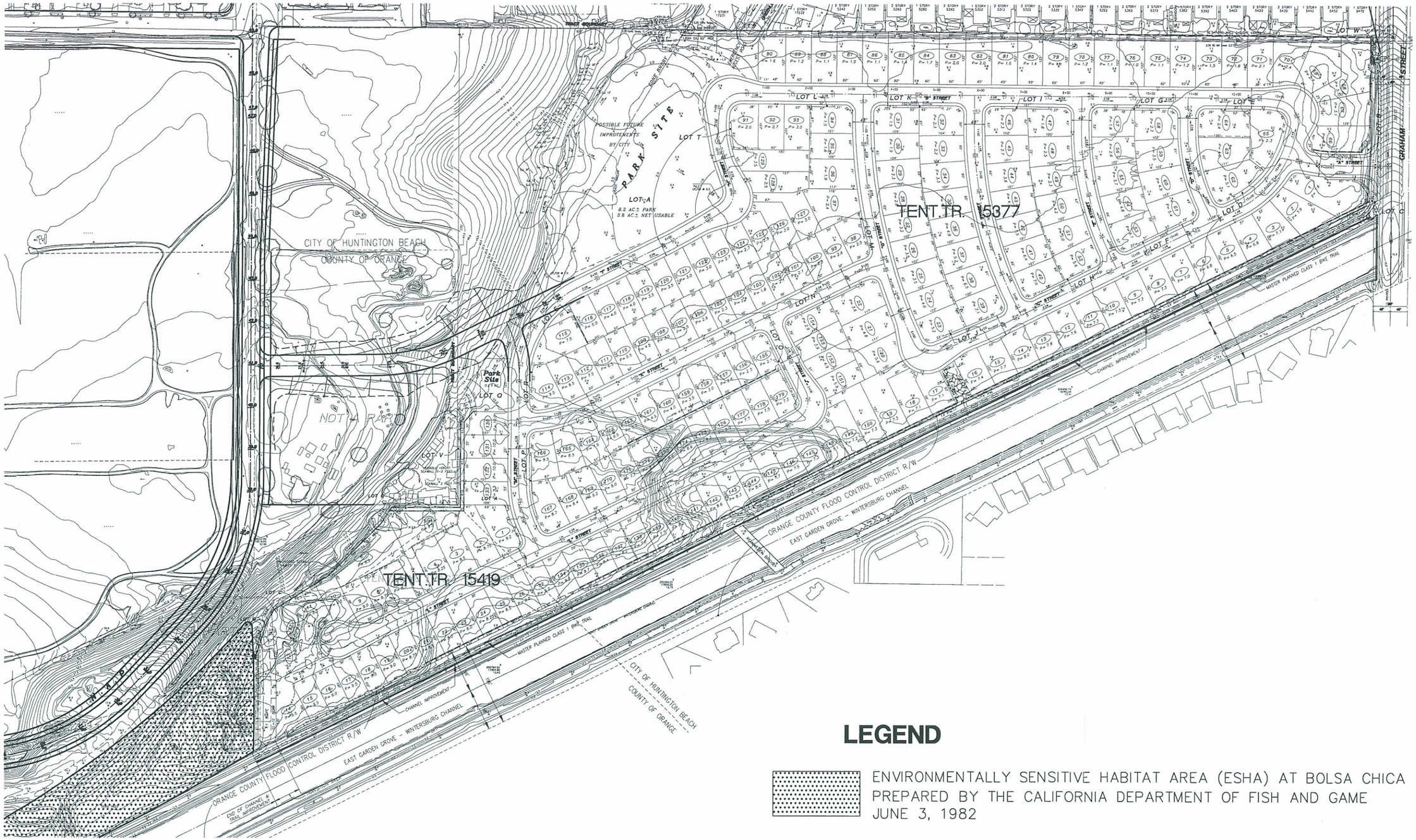
Description of Alternative

Alternate Roadway Alignment B involves a westerly extension of "I" Street, running along the proposed park's southern boundary, connecting to Bolsa Chica Street (refer to Exhibit 45).

Environmental Assessment

LAND USE COMPATIBILITY

This alternative would result in land use compatibility impacts greater than those resulting from the proposed project. This alternative would consist of the construction of ~~208~~ ***206*** residential units and the park site. Additionally, construction of this middle extension roadway would cut through privately owned property proposed for development. The massive cut required to construct this roadway would completely eliminate this property's development potential.



LEGEND

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PREPARED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME
JUNE 3, 1982

MAP DATE IDENTIFIER
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Scale: (approx.) 1"=225'

EDAW, Inc.

Source: Hunsaker & Associates Irvine, Inc.

Exhibit 45

Circulation Alternative "B"

TRANSPORTATION/CIRCULATION

According to Darnell & Associates, Inc. (project traffic engineers), in order to maintain a maximum eight percent (8%) grade, this extension would create a massive cut (from 130 feet to 70 feet wide) through privately owned property virtually destroying its development potential. Because of the cut slope, access from that property to this street would not be feasible without further impacting that property.

Depending on the vertical and horizontal alignment of Bolsa Chica Street, there may be a sight distance problem for southbound to eastbound left turns and for westbound vehicles seeing northbound vehicles at prevailing speeds on Bolsa Chica Street.

AIR QUALITY

This alternative would result in greater short-term air quality impacts than the proposed project. Impacts would result from short-term construction due to the addition of truck and construction vehicle traffic to construct the roadway extension. This alternative would result in long-term mobile source emissions similar to the proposed project. The roadway extension would not affect the number of residential units to be built; therefore, traffic volumes resulting in mobile source emissions would be similar.

NOISE

This alternative would result in greater short-term impacts than the proposed project during construction activities. The alternative would require construction of the roadway extension in addition to construction of the proposed homes. Noise impacts could possibly be greater due to the fact that the roadway connection could cause more vehicles to travel through the project site, especially if development within the Bolsa Chica area were to be developed.

EARTH CONDITIONS

This alternative would result in impacts associated with expansive soils, ground shaking and other geotechnical constraints, similar to the proposed project. Additionally, constructing the middle roadway connection to Bolsa Chica Street as proposed with this alternative would result in impacts not experienced by the proposed project. This alternative would require cut slopes approaching 40 feet in height. The slopes could be considered grossly stable but potentially unstable and may require protection in the form of geogrid reinforcement and/or stabilization with geogrid-reinforced replacement fills. Impacts related to earth conditions would be greater than the proposed project.

DRAINAGE/HYDROLOGY

This alternative would result in surface water runoff due to the covering of surface soils with impermeable structures and surfaces related to the homes and the roadway extension. This alternative would result in potential impacts related to flooding, greater than that of the proposed

project. This alternative would result in an increase in water runoff that is greater than the proposed project. The roadway extension would increase the amount of impervious surfaces related to the proposed project. Impacts related to drainage/hydrology would be greater than the proposed project.

BIOLOGICAL RESOURCES

This alternative would result in greater impacts to biological resources due to a larger area that would be affected by implementation of this roadway.

ARCHAEOLOGICAL RESOURCES

This alternative would result in potential impacts to archaeological resources, similar to that of the proposed project. Construction of the roadway extension would still be required to take into consideration significant archaeological resources located on site, similar to the proposed project.

PUBLIC SERVICES AND UTILITIES

This alternative would result in impacts to public services and utilities, similar to those of the proposed project. Construction of the roadway extension would not increase, decrease, or eliminate impacts related to public services and utilities.

Status of Alternative

This alternative may be technically feasible. According to Darnell & Associates, Inc., this alternative could create a reasonably safe intersection with Bolsa Chica Street; however, it would be extremely costly and would destroy adjacent property in the process. It does not meet the project applicant's objectives. This alternative does not reduce impacts of the proposed project and creates new impacts not caused by the proposed project; however, it is technically feasible. It remains under consideration.

ALTERNATE ROADWAY ALIGNMENT C – SOUTHERLY EXTENSION

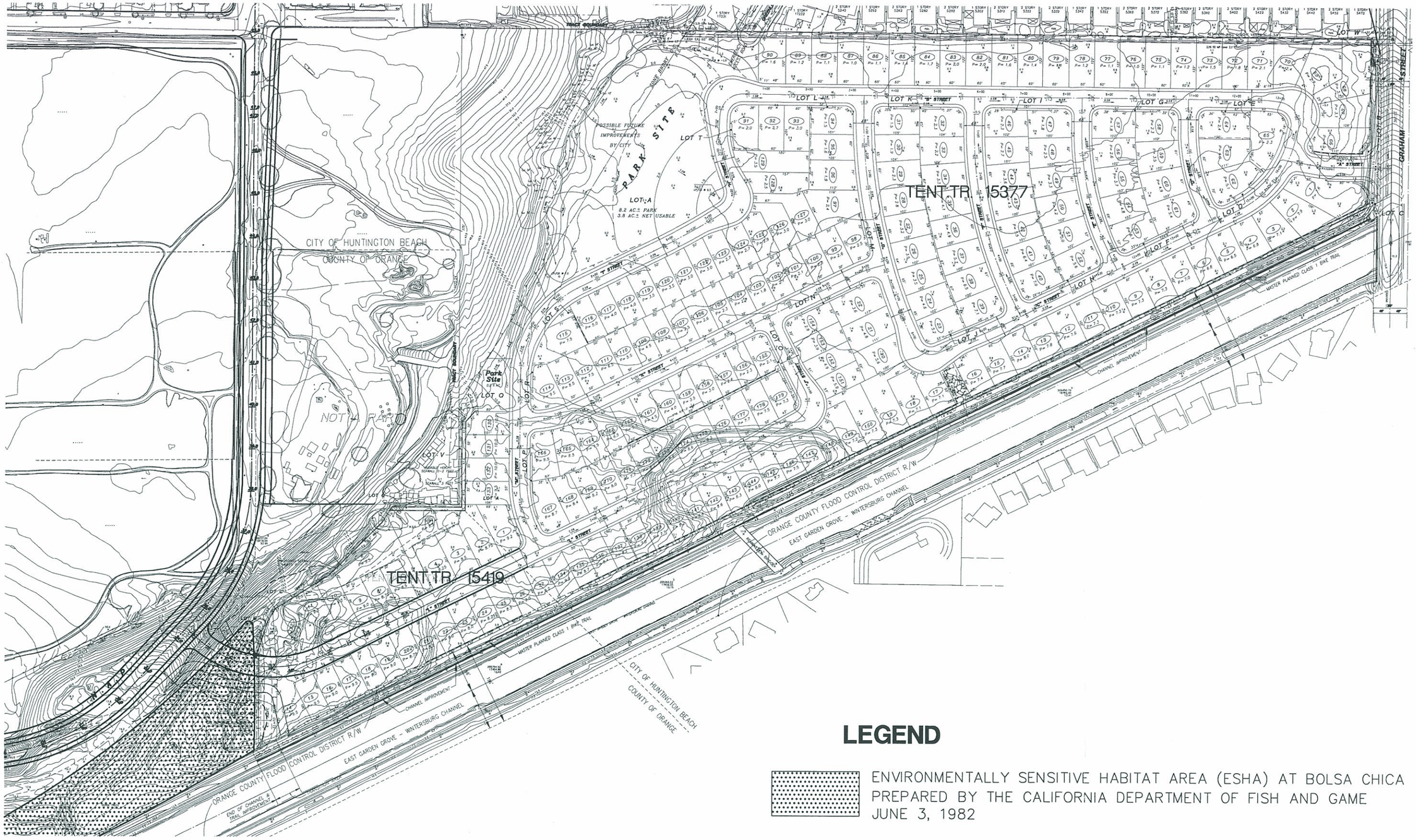
Description of Alternative

Alternate Roadway Alignment C involves a westerly extension of "L" Street in the southern portion of the project site that connects to Bolsa Chica Street (refer to Exhibit 46).

Environmental Assessment

LAND USE COMPATIBILITY

This alternative would result in land use compatibility impacts similar to those resulting from the proposed project.



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Source: Hunsaker & Associates Irvine, Inc.

Exhibit 46

Circulation Alternative "C"